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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,708	08/20/2003	Lee Eric Kilmer	1285.004US2	8442
21186	7590	10/19/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			WU, YICUN	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/645,708	Applicant(s) KILMER ET AL.	
	Examiner Yicun Wu	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

III. DETAILED ACTION

1. Claims 16-31 are presented for examination.

Response to Applicant' Remarks

2. (1) . Applicant argues: “in claims 16-31 have the practical application when they are used to generate OLAP queriesdatabase:

Examiner asserts that Applicant did not claim these features in Applicant’s claims, therefore, The 101 rejection is maintained.

- (2) “Cazemier does not teach or suggest a query object model” and “does not teach or suggest a data structure or a data object which modes an OLAP query”

Examiner disagree. Cazemier clearly generating an OLAP query statement (see col. 3, lines 43-49) and this is considered by the Examiner as models an OLAP query.

Claim Rejections - 35 USC 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

4. Claims 16-31 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards the final result that is “useful, tangible and concrete (See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

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According to the New Guidelines of October 26, 2005, which states that “A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557)... a specific machine to produce a useful, concrete, and tangible result (State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

Examiner requests Applicant to include in Applicant’s claimed limitations (in all the claims) the following:

Claim limitation describing --

- 1. What is the practical application?*
- 2. What is final result which Applicant considers concrete, useful and tangible?*

Because the “practical application, result, concrete, useful and tangible” limitations are not claimed in Applicant’s claims, Examiner asserts that the above listed claims are nonstatutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 16-20, 22-23, 25-26, 28-29 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated over Cazemier et al., (U. S. Patent No. 6,609,123).

As to claim 16, Cazemier et al. discloses an OLAP query generation engine, comprising:
a query object model (i.e. metadata model. Col. 3, lines 50-60), the query object model (i.e. metadata model. Col. 3, lines 50-60) including a data structure (fig. 2) which models an OLAP (fig. 10) query (i.e. query. Col. 3, lines 50-60); and

a programming interface for generating an OLAP query statement (i.e. query specification interface. Col. 3, lines, 50-60) from the query object model (i.e. metadata model. Col. 3, lines 50-60) according to a structured query format (i.e. data source query. Col. 3, lines, 50-60) specified by the query object model (i.e. based on the model objects. Col. 3, lines, 50-60).

As to claim 17, Cazemier et al. discloses an engine, wherein the data structure models the OLAP query in an abstract form that is compatible with a plurality of different OLAP structured query formats (i.e. The metadata model 15 stores metadata about its underlying one or more data sources 100. It is used to provide a common set of business-oriented abstractions of the underlying data sources 100. col. 6, lines 41-44).

As to claim 18, Cazemier et al. discloses an engine, wherein the data structure models the OLAP query in a form different from the implementation of underlying OLAP servers (i.e. The metadata model 15 stores metadata about its underlying one or more data sources 100. It is used

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to provide a common set of business-oriented abstractions of the underlying data sources 100.
col. 6, lines 41-44).

As to claim 19, Cazemier et al. discloses an engine, wherein the programming interface is also for maintaining the OLAP query statement (i.e. query specification interface. Col. 3, lines, 50-60).

As to claim 20, Cazemier et al. discloses an engine, wherein the programming interface is also for executing the OLAP query statement (i.e. query specification interface. Col. 3, lines, 50-60).

As to claim 22, Cazemier et al. discloses an engine, wherein the query object model is capable of specifying first, second and third structured query formats, and the programming interface generates the query statement using the first, second and third formats when the query object model specifies the first, second and third structured query formats, respectively (i.e. The above embodiments were described using SQL. However, the present invention may use other equivalent language that supported by data source providers (e.g. PowerPlay cubes, which are accessible through MDX). Col. 67, lines 10-15).

7. As to claims 23, 25, 26, 28-29 and 31, the limitations of these claims have been noted in the rejection above. They are therefore rejected as set forth above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 21, 24, 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cazemier et al., (U. S. Patent No. 6,609,123), in view of Malloy et al (U.S. Patent No. 6,122,636).

As to claims 21, 24, 27 and 30, Cazemier et al. discloses an engine, wherein the query object model is capable of specifying the MDX (e.g. PowerPlay cubes, which are accessible through MDX). Col. 67, lines 10-15), and the programming interface generates (i.e. query specification interface. Col. 3, lines, 50-60) an MDX query statement (e.g. PowerPlay cubes, which are accessible through MDX). Col. 67, lines 10-15) when the query object model specifies the MDX query format, respectively (e.g. PowerPlay cubes, which are accessible through MDX) Col. 67, lines 10-15).

Cazemier et al. does not teach the RS query formats.

Malloy et al teaches the RS query formats (i.e. Essbase OLAP software. Col. 3, lines 45-50).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cazemier et al. to include RS query formats.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cazemier et al. by the teaching of Malloy et al to include RS query formats with the motivation to provide an enhanced technique for using RDBMS products as storage managers for OLAP systems as taught by Malloy et al (col. 2, lines 30-39).

Conclusion

10. **THIS ACTION IS MADE FINAL**, Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory- period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply-expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yicun Wu whose telephone number is 571-272-4087. The examiner can normally be reached on 8:00 am to 4:30 pm, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Yicun Wu
Patent Examiner
Technology Center 2100



JEFFREY GAFFIN
SUPERVISORY/PATENT EXAMINER
TECHNOLOGY CENTER 2100

October 12, 2006